THE SERVICES.

WAR OFFICE.—Deputy Surgeon-General Annesley Charles Castriot de Renzy, C.B., of the Bengal Army, to be Surgeon-General; Brigade Surgeon John Picthall, M.D., of the Bengal Army, to be Deputy Surgeon-General; Surgeon-Major George William Jameson, of the Bengal Army, Surgeon-Major Lindsay Frederick Dickson, M.D., of the Bengal Army, Surgeon-Major John Bilderbeck, of the Madras Army, to be Brigade Surgeons.

INDIA OFFICE.—The Queen has approved of the retirement of Surgeon-Major John James Durant, of the Bengal Army.

ENGINEER VOLUNTEERS.—1st West Riding of Yorkshire: Surgeon Thomas Whiteside Hime resigns his commission; Acting Surgeon George Robinson to be Surgeon; William Dale James, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the East Yorkshire Regiment: Surgeon John Augustus Wallis, M.B., resigns his commission; Herbert Rendell, Gent., M.B., to be Acting Surgeon.—20th Lancashire (2nd Manchester): John Scott, Gent., M.A., M.B., to be Acting Surgeon.—6th (West) Suffolk: Acting Surgeon Joseph Clement Norman resigns his appointment; William Thomas Angove, Gent., to be Acting Surgeon.—3rd Battalion, South Staffordshire Regiment: Moses Taylor, Gent., to be Acting Surgeon.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Robert Turner, to the *Victor Emanuel;* Surgeon T. J. Preston to the *Hibernia;* Surgeon C. L. Vasey, to the *Sultan;* Surgeon Alexander W. M'Leod, to Hong Kong Hospital, vice Bentham; Surgeon Edward H. Williams, to Haslar Hospital, vice M'Leod; Surgeon Alexander W. W. Reid, to the *Asia*, vice Williams; Surgeon George M'Cuffe, to the *Hecla*, complement incomplete; Staff Surgeons George Henry Madeley, to the *President*, additional for temporary service during absence of Fleet Surgeon Charles A. Lees; Surgeon Edward Ferguson, to the *Vernon.*

Correspondence.

"Audi alteram partem."

CHOLERA AND QUARANTINE.

To the Editor of THE LANCET.

SIR,—Continental editors and their correspondents, especially French and Italian, continue to ascribe the outbreak of cholera in Egypt to the conduct of the British Government and of the Government of India, in having required a relaxation of quarantine regulations established some time ago at Suez against vessels from India, under the authority of the Egyptian Sanitary Board. French and Italian writers must therefore place a firmer reliance on quarantine than is admitted by the great majority of those having the greatest experience of cholera—viz., medical officers of the Indian services.

This continental outcry for antiquated quarantine regulations indicates that our neighbours believe in the dissemination of cholera by human intercourse as the only way, or at least the principal way, in which the disease spreads. But the study of epidemics of cholera in India leads to the inevitable conclusion that while cholera may, and often does, spread by direct intercourse, its progress is more frequently effected in some other manner. It occurred to me to investigate several epidemics of cholera throughout the extensive province of Rajpootana, and I could cite numerous instances, commencing so far back as 1849, where the conveyance of the disease by human intercourse appeared as certain as the exact sciences; and I could cite numerous instances where the malady originated under the impossibility of such intercourse. I say the impossibility of such intercourse, because the disease broke out within a few days or hours at places so far apart, between which in a country destitute of railways communication was impossible, and in some instances impossible by express rail speed. The cholera, therefore, must have been conveyed through the atmosphere by germs, or it must have been the revitalisation of the germs of a previous epidemic, or it must have originated *de novo.* Now, there is nothing far-fetched in the germ theory as applied to cholera. Most persons who have been in the East will recollect how rapidly and how far impalpable sand dust is brought, after probably a high wind, from the semi-desert districts, travelling hundreds of miles in a night, sometimes apparently against the wind, and doubtless brought by an upper current, and in a calm spreading in all directions. Cholera germs, for aught we know, may be even more impalpable than this fine sand dust, or even than the atoms composing the scent of a flower. The revitalisation theory entails the belief in such germs lying dormant in the soil or otherwise for months or even years, from the period of the last epidemic, until revitalised under favourable but unknown atmospheric conditions. Personally I believe cholera originates *de novo,* and that if it is not conveyed by direct intercourse, it usually does so originate. Under this dual belief only do I think the irregular dissemination of the disease in India can be explained. Given certain but unknown favourable conditions of matter, certain but unknown favourable conditions of atmosphere, and certain but unknown conditions of human constitution, and I fail to see why a disease poison should not be produced and act as we know other poisons may be made to originate and act. But in whichever of the three manners indicated above cholera spreads, it is evident that its progress cannot be prevented by quarantine regulations. This reduces any advantages which may be derived from quarantine to instances where actual disease is present, or where it may have been present within a few days. There is a general consensus of opinion that the period of incubation of cholera is not more than ten days, and ordinarily only from two to three days. As the voyage from India to Suez usually requires a longer period than ten days, it is not possible that cholera could be introduced into Egypt by the crew or passengers of a vessel leaving India with a clean bill of health, and remaining free from disease during the passage.

At the commencement of last year, shortly after the Egyptian authorities first instituted quarantine, I brought the subject before the Medical and Physical Society of Bombay. At a full meeting, the members present being both native and Anglo-Indian, it was voted, if I recollect right, without dissent, that quarantine regulations enforced at Suez against ships from Bombay with a clean bill of health would be useless and unnecessary. I imagine it would be impossible to assemble a number of gentlemen with greater experience of cholera than those who took part in the discussion on this matter, and their deliberately expressed opinion was doubtless calculated to strengthen the position of the British authorities in requiring the removal of the vexatious quarantine regulations imposed by the so-called Egyptian Sanitary Board.

But there is the question of the conveyance of cholera through the medium of cargo and merchandise. This I believe possible, and, moreover, could detail the history of a recent outbreak investigated by a committee of which I was president where the evidence of the conveyance of cholera through the medium of cargo was to me, and to the members of the committee, conclusive. But I fail to perceive how quarantine regulations are to prevent this. If cholera is conveyed by cargo, it must be by the infection of the cargo by germs. Exposure to the air would result in the liberation of such germs, while the use of heat or fumigations in sufficient force to destroy the germs would injure or destroy most kinds of cargo, and especially so that cargo—as bags of provisions, for instance—in which cholera germs would be most likely to lurk.

Notwithstanding any continental outcry, our Indian, and consequently our greater, experience of cholera than that of any of our critics renders us confident that the existing Orders of Council on the subject of quarantine are right, good, and rational. They are directed against cases of actual or suspected disease, and not vexatiously against healthy people. It appears our continental neighbours would rather trust to keeping out cholera by quarantine regulations than to rendering cholera innocuous by good sanitation. But experience demonstrates that keeping out cholera by quarantine regulations is impossible, while on the other hand it is quite possible to render it comparatively harmless, or even quite harmless, by good sanitation. In this matter much of the Continent is behind England, and therefore the inhabitants of continental cities have most cause for fear. Hence frantic declarations against the

British authorities; spasmodic efforts to clean Augean stables; and the clinging to quarantine, as the drowning man to the reed.

I am, Sir, yours truly,

W. J. MOORE, C.I.E.,

Deputy Surgeon-General (late), Presidency Division, Bombay.

United Service Club, July 8th, 1883.

"NOTIFICATION OF INFECTIOUS DISEASE IN EDINBURGH."

To the Editor of THE LANCET.

SIR,—Dr. Carter's reply is no answer to my letter. He now avers that he is in favour of notification, and that he objects to the "creation of a new offence for medical men, and to their complete subordination to medical officers of health." Had he been conversant with the literature of this important subject, he would have known, first, that whatever plan of notification is adopted there must be penalties attached to non-compliance with an Act of Parliament; and, second, that it is only in the Edinburgh plan that medical men are completely emancipated from the interference of sanitary officials, all other plans, whether dual by the householder and medical man, or single by the householder alone, necessarily involving the interference of the sanitary authorities. Again, Dr. Carter manipulates statistics in such a way as to confirm your readers in the well-known saying that by statistics you can prove anything. Because, forsooth, the death-rate of Edinburgh (among the lowest in the country) has not lessened in the same mathematical ratio as that of the United Kingdom, he argues against the success of our system of notification. I might as well argue that because the death-rate of London is so low, notification of infectious diseases could be of little use in the metropolis, although for the last few years small-pox has been epidemic there, and a source of danger to the whole community —no fewer than three or four of our recent outbreaks in Edinburgh having been traced to that source. Dr. Carter is curiously incorrect as to my duties. No one in his senses would dream of instituting "in trivial cases" what is equivalent to the coroner's inquest; and again, he speaks of what undoubtedly would be my duty in extreme cases, involving great public risk, as my usual practice. Now, one great advantage we have obtained from notification in Edinburgh (about which Dr. Carter knows nothing) is that since 1879 medical men and the laity have become so enlightened that by both parties the importance of speedy isolation is recognised, and recourse to compulsion is unknown. The source of Dr. Carter's information on these and other points is well known, and the absurdities he gravely states as facts excite the ridicule of the profession here, who, I venture to think, will bear comparison with their brethren in Bolton, Blackburn, or Warrington. Dr. Carter and his friends have on two occasions issued circulars to medical men in Edinburgh to ascertain their feeling on the matter. Why is it that the result of these plebiscites has never been published? Will Dr. Carter and his friends try their fortune again? Lastly, I can assure Dr. Carter that it was in no sneering spirit I alluded to the high death-rate of Liverpool, and to the alarming outbreak of typhoid; both are matters, in my opinion, of imperial interest, and may become public scandals.

You kindly allowed me to notice a statement in your columns, and Dr. Carter has begun a correspondence. I shall be happy to afford that gentleman and others any information they may wish on sanitation in Edinburgh, but I decline to encroach further on your valuable space.

I am, Sir, yours faithfully,

Edinburgh, July, 1883. HENRY D. LITTLEJOHN, M.D.

To the Editor of THE LANCET.

SIR,—Dr. Littlejohn, in his letter on the above subject in your issue of the 30th ult., says:—"Dr. Carter's statistics, unfortunately, are as faulty as his quotations. He puts words into my mouth which I did not use, and he avails himself of incorrect statistics, although he and Dr. Hamilton could easily, had they chosen to apply to the proper quarter, have procured the true ones." I presume I am included in the above statement through a paper which I published a few months ago on the "Compulsory Notification of Infectious Diseases." That paper contained the conclusions I had arrived at from a visit which I, as one of a deputation appointed by the Health Committee of Liverpool to investigate the working of the Notification Acts, paid to several of the towns where they are in force. With regard to Edinburgh I gave certain facts which tended to show that there the results of compulsory notification were the least satisfactory of all. These facts have never been denied, so far as I am aware, by Dr. Littlejohn, but now in an indirect way, if I understand the paragraph aright, he accuses me of availing myself of incorrect statistics. My pencil notes, taken at the time in the Public Health Office, Edinburgh, are these:—"The staff consists of the medical officer of health, his clerk, two inspectors, and one constable. Number of certificates with the 'No' crossed out about one in twenty-five. Every case where immediate attention is indicated the medical officer sends at once to remove the case; sometimes they object, and 'we do not force them.' Unless fumigation, &c., is applied for we do not, as a rule, send the sanitary inspector to do it. It also happens in a small house where there is no removal that they cannot always fumigate. In very many instances of the poor living in flats, or in one room of a flat, fumigation could not be carried out because there was nowhere to remove the people to whilst the process was going on; they could not be left in the passages or landing for so many hours, and the neighbours would not take them in. The sanitary authorities undertake the removal of bedding and clothes to the Blind Asylum, where the disinfection is carried out, but the latter charges for the work, and for conveying the articles home. Present scarlet fever outbreak, there had been 532 notifications of it sent in from July 1st to Sept. 17th, 1882, inclusive, a period of thirteen weeks. The notifications of infectious diseases sent in during the year 1880 were 5705, of these 331 were removed to hospital, and 642 apartments were fumigated. The fees paid to medical men from Nov. 7th, 1879, to June 30th, 1882, amounted to £1787. The last six months—namely, from Jan. to June, 1882—£632 had been paid. One medical man received as much as £28 in the half year."

Now, I think the conclusions which most people would arrive at from the above facts are these:—That the amount of fumigation of infected houses and rooms done by the sanitary authority is small, being only about one in nine reported cases. That there are very many rooms, and these of the worst kind, that are not fumigated because of the practical difficulties in the way. That as only about one in twenty-five of the certificates sent in leads to any investigation or interference on the part of the sanitary authorities, very little check is put by them on the spread of disease. That the staff employed would be totally inadequate for the work devolving upon it, if that work was carried out in all the fulness which the outside public is led to believe it is, including, as that work now does, the removal of infectious cases; the fumigation of houses; the oversight of dairies; the examination of sewers, drains, and all reported sources of infection; the carrying of infected articles to the Blind Asylum, in addition to all the duties of the department which existed before the passing of this Act; that the removal of infected persons is hedged about with difficulties which the authorities do not care to grapple with, and that it is mainly, if not entirely, members of the pauper class or those immediately above them who are removed. This is no more than every town does without the Acts. Liverpool, without them, removes a proportionately much larger number every year to workhouse or hospital than Edinburgh does. In 1882 Liverpool, with a population of 560,377, removed 2502 cases to workhouse or hospital. In the same year Edinburgh, with a population of 232,440, removed only 539 cases. Lastly, the one part of the system which works vigorously is the certificate giving. Venturing to give a natural and common sense explanation of this, we are told by Dr. Littlejohn that this is an estimate of professional honour which is not complimentary. Yet there has been nothing derogatory to the highest standard of professional morality asserted. The Edinburgh medical men have confidence that the understanding come to with Dr. Littlejohn, of "no interference unless they desire it," will be honourably adhered to, and they on their part reciprocate the feeling, and certificates pour in.

In conclusion, I would say that any system of certificate giving, or to give it the name now in use, of compulsory notification, must, in my opinion, be so hedged about with provisos to make it acceptable to the public and the pro-